

REMARKS

The application has been amended to place the application in condition for allowance at the time of the next Official Action.

The specification is amended to address the editorial errors noted in the Official Action. The suggestions in the Official Action are incorporated to address these errors.

A substitute Abstract of the Disclosure is provided on an accompanying separate sheet. The replacement abstract and the above-noted changes are believed sufficient to address the objection to the specification noted on pages 2 and 3 of the Official Action.

Claims 1-4 and 6-33 were previously pending in the application. Claims 21 and 33 are canceled and new claim 34 is added. Therefore, claims 1-4, 6-20, 22-32 and 34 are presented for consideration.

Canceling claim 21 is believed to obviate the double patenting rejection as to this claim.

Claims 2-4 and 14-33 are amended to include the correct nomenclature for "ft-lbs" to address the claim objections noted in the Official Action.

Claims 1 and 6-11 were rejected under 35 USC §102(b) as being anticipated by the German reference DD 203260. That rejection is respectfully traversed.

Claim 1 is amended to clarify that the predetermined shear torque rating is a rating based on a selected one of a range of ratings according to a classification of risk related to the intended use of the bit. Support for this feature can be found at least on page 6, lines 13-17.

By the presently-recited bit, the wasted section will twist and shear off as a safety feature. See also page 6, lines 6-12.

DD 203260 does not disclose a predetermined shear torque rating related to the use of the bit and selected from one of a range of ratings according to the risk related to the intended use.

Rather, DD 203260 deals with a different problem and thus a different solution. In DD 203260, the inventor attempts to overcome the prior art problem of drills breaking at unpredictable locations and having drill bits that break at a break zone that are not reusable. In DD 203260, the drill is made reusable by providing flats on the broken off section and the break zone is made predictable.

However, DD 203260 fails to disclose a rating of any kind. Instead, DD203260 uses a designed break-off section to control his break as opposed to the prior art having an inhomogeneous material that breaks at uncontrolled locations.

A partial machine translation of DD 203260 is included in the Appendix that supports applicant's position that DD 203260

does not disclose a predetermined shear torque rating, the rating being a selected one of a range of ratings according to a classification of risk related to the intended use of the bit as recited.

As the reference does not disclose in as much detail as that which is recited, the anticipation rejection is not viable. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1 and 6-11 were rejected under 35 USC §102(b) as being anticipated by DE 29700943. That rejection is respectfully traversed.

DE '943 is similar to DD 203260 and teaches a break section so that a controlled break will occur at the break section as opposed to within the chuck. A partial machine translation of this reference is included in the Appendix.

However, similar to DD 203260, DE '943 fails to disclose a predetermined shear torque rating, the rating being a selected one of a range of ratings according to a classification of risk related to the intended use of the bit.

As the reference does not disclose that which is recited, the anticipation rejection is not viable. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 2-4, 14-16, 19-21, 24-26, 29-31 and 33 were rejected under 35 USC §103(a) as being unpatentable over DD 203260. That rejection is respectfully traversed.

The above-noted claims depend from claim 1 and further define the invention and are believed patentable over DD 203260 at least for depending from an allowable independent claim.

Moreover, the criticality of the claimed ranges are shown in Figure 5 and described on page 6, line 13 to page 7, line 18 wherein the torque ratings are related to the risk of different uses of the drills with the rating matched to the risk of use. The ratings will determine the break point which in turn will reduce injuries to the user.

By contrast, DD 203260 deals with damage to the work piece. DD 203260 does not contemplate a shear torque rating in the recited ranges.

Accordingly, claims 2-4, 14-16, 19-21, 24-26, 29-31 and 33 are believed patentable regardless of the patentability of the claim from which they depend.

Claims 12, 13, 17, 18, 22, 23, 27, 28 and 32 were rejected under 35 USC §103(a) as being unpatentable over DD 203260 in view of WANNER 5,028,057. That rejection is respectfully traversed.

WANNER is only cited for features of the dependent claims. WANNER does not overcome the shortcomings of DD 203260 as set forth above with respect to claim 1. Since claims 12, 13,

17, 18, 22, 23, 27, 28 and 32 depend from claim 1 and further define the invention, these claims are believed patentable at least for depending from an allowable independent claim.

In addition, the proposed combination of references does not possess a rational underpinning to support the legal conclusion of obviousness.

The coding of WANNER relates to inadvertent tool inversion due to wear and is not related to torque shear. Moreover, such coding is applied to the tool for the purpose of being "machine read" for automatically setting machine operation. See, for example, column 5 of WANNER. Such coding would not be useful for coding torque rating or safety information.

Moreover, DD 203260 is related to a simple thread tap. The arrangement of WANNER is a complex arrangement with a complex machine operation according to the coded shaft on the tool. There would be no motivation to add to the complexity of DD 203260 by including the coding of WANNER on the device of DD 203260.

Claims 2-4, 14-16, 19-21, 24-26, 29-31 and 33 were rejected under 35 USC §103(a) as being unpatentable over DE 29700943. That rejection is respectfully traversed.

The above-noted claims depend from claim 1 and further define the invention and are believed patentable over DE '943 at least for depending from an allowable independent claim.

In addition, the criticality of the claimed range is shown in Figure 5 and disclosed on page 6, line 13 to page 7, line 19 wherein the torque ratings are related to the risks of different use of the drill with the rating matched to the risk of the use to prevent injuries to a user.

DE '943 does not recognize preventing injury to a user and rather attempts to prevent damage to the work piece.

Moreover, the Federal Circuit has held that a finding of "obvious design choice" is precluded where claimed structure and the function performs are different from those of the prior art. *In re Chu*, 606 F.3d 292, 36 USPQ2d 1089, 1094, 1095 (Fed. Circ. 1995).

As set forth above, DE '943 does not have a wasted safety section having a predetermined shear torque rating, the rating being a selected one of a range of ratings according to a classification of risk related to the intended use of the bit. Thus, the structure of the claimed device and that of DE '943 are different. In addition, the function of DE '943 is to break at a particular point to protect the work piece.

By contrast, the recited wasted piece is a safety feature that breaks to prevent injury to a user. Thus, the function that these elements perform is also different. Therefore, obvious design choice is precluded and claims 2-4, 14-16, 19-21, 24-26, 29-31 and 33 would not have been obvious in view of DE '943.

Claims 12, 13, 17, 18, 22, 23, 27, 28 and 32 were rejected under 35 USC §103(a) as being unpatentable over DE '943 in view of WANNER. That rejection is respectfully traversed.

WANNER does not overcome the shortcomings of DE '943 as set forth above with respect to claim 1. Since claims 12, 13, 17, 18, 22, 23, 27, 28 and 32 depend from claim 1 and further define the invention, these claims are believed patentable at least for depending from an allowable independent claim.

In addition, these claims are believed to define over the art of record because the motivation for combining the references does not possess a rationale underpinning to support the legal conclusion of obviousness.

WANNER is related to a complex arrangement of machine operation according to a coded shaft on a tool. As DE '943 is related to a simple thread tap, one of ordinary skill in the art would not have been motivated to add the complexity of WANNER to the simple thread tap in order to render the claims *prima facie* case obvious. Reconsideration and withdrawal of the rejections are respectfully requested.

New claim 34 is added. Support for new claim 34 can be found in the original claims and is believed to define over the art of record at least for the reasons already enumerated with respect to claim 1.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been

placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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**Appendix:**

The Appendix includes the following items:

- substitute Abstract of the Disclosure
- partial machine translation of DD 203260
- partial machine translation of DE 29700943